

News Release

U.S. Department of the Interior U.S. Geological Survey

Release Contact

January 30, 2004 Angela P. Paul

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The Quality of Water and Bottom Sediment in the Lower Humboldt River Basin is Summarized in a USGS Report

A recently released report by the U.S. Geological Survey (USGS), Department of the Interior, summarizes and compares data collected in the lower Humboldt River Basin, to those obtained during an earlier reconnaissance investigation under drought conditions. The Humboldt Wildlife Management Area (HWMA), located within the lower Humboldt River Basin of northern Nevada, has been identified as an ecosystem in decline. This area receives agricultural drainage and inflow from the river. Elevated concentrations of water-borne substances have caused concern within wildlife management groups such as the U.S. Fish and Wildlife Service (USFWS) and Nevada Division of Wildlife.

Due to those concerns regarding the potential effects of irrigation drainage on water quality and ecological health of the wetlands within the HWMA, the USGS sampled water and bottom sediment within the lower Humboldt River Basin from May 1998 to July 2000, in collaboration with the USFWS, Bureau of Reclamation, and Nevada Department of Conservation and Natural Resources.

Regulatory agencies, such as the U.S. Environmental Protection Agency, have established concentration limits (criteria) for certain substances to protect both human and ecological health. Concentrations of selected substances determined during this study were compared with ecological criteria currently adopted by the State of Nevada and other governmental agencies.

"It's important to evaluate water-quality characteristics under different hydrologic conditions to better understand processes influencing the quality of water, in order to develop more effective water-management programs," said Angela Paul, a USGS scientist and senior author of the report.

(MORE)

The 94-page report, titled "Data on Streamflow and Quality of Water and Bottom Sediment in and near the Humboldt Wildlife Management Area, Churchill and Pershing Counties, Nevada, 1998-2000," by Angela P. Paul and Carl E. Thodal, is U.S. Geological Survey Open-File Report 03-335. It

is available for inspection at the Humboldt County Library (85 E. Fifth St., Winnemucca, Nev.), Pershing County Library (1125 Central Ave., Lovelock, Nev.), Churchill County Library (553 S. Maine St., Fallon, Nev.), Elko County Library (720 Court St., Elko, Nev.), Lander County Library (625 S. Broad St., Battle Mountain, Nev.), Eureka Branch Library (80 S. Monroe St., Eureka, Nev.), and at the U.S. Geological Survey offices in Carson City (333 W. Nye Lane, Room 220), Henderson (160 N. Stephanie St.), and Elko (275 Third Street, Room 208). The report also may be inspected at the USGS libraries in Menlo Park, Calif., Denver, Colo., and Reston, Va. The report is also available on the World Wide Web as a PDF document. The URL is http://pubs.water.usgs.gov/ofr03335.

The report may be purchased at cost from the U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, CO 80225-0286 (telephone 1-888-ASK-USGS). The price is \$40.00 per copy plus \$5.00 per order for shipping and handling. Request must specify report number OFR 03-335 and should include a check or money order payable to "Department of the Interior-USGS."

Additional information about this and other USGS studies of water resources in Nevada may be obtained by e-mail to **GS-W-NVpublic-info@usgs.gov**> or by visiting the USGS home page at **http://nevada.usgs.gov**>.

As the Nation's largest water, earth, and biological sciences and civilian mapping agency, the USGS works in cooperation with more than 2,000 organizations across the country to provide reliable, impartial scientific information to resource managers, planners, and other customers. This information is gathered in every State by USGS scientists to minimize the loss of life and property from natural disasters, to contribute to the conservation and the sound economic and physical development of the Nation's natural resources, and to enhance the quality of life by monitoring water, biological, energy, and mineral resources.

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